Week-1 Homework Exercise Due March 30, 2016
Pakistan Flood, July-August 2015
Global Flood Monitoring System (GFMS)

This exercise is designed to provide practice in using GFMS to monitor rainfall and flood intensity. Please go through the following case study of Indus River flooding over Pakistan and answer the questions in the Google Form at the following link: http://goo.gl/forms/obubMNf5HH

Part 1: Time Series of Flood Intensity

- Go to http://flood.umd.edu/
- Scroll down to **Flood Detection/Intensity (depth above threshold [mm])**
- In **'Pan the map'** panel (right to the map)
  Zoom over Pakistan by suing '**Zoom in'** arrow
  In the '**Plot time series for an individual point (lat, lon)**:' Enter the following lat-lon in the boxes: **29.37 and 70.71**
  Select Time :
  - **T1: 00Z01Jul 2015**
  - **T2: 21Z31Aug2015**
- Click on '**See time series.'**
- You will get a time series of flood intensity.
- You may save the time series plot on your computer (you may use press control key and right mouse click to and save as an image)
- From the time series note down the date when the flood intensity (depth above threshold) was maximum, and note down the value of depth above threshold.
- How many flood events were there with the flood intensity above 600 mm?
- **Repeat the time series plot for the (lat, lon) 35.42 and 74.12**
- You may save the time series plot on your computer (you may use press control key and right mouse click to and save as an image)
- From the time series note down the date when the flood intensity (depth above threshold) was maximum, and note down the value of depth above threshold.
- Was the flood intensity larger at this location compared to at the previous location (**29.37 and 70.71)?**

Optional Exercise: Streamflow Maps

- Go to http://flood.umd.edu/
- Scroll down to **Streamflow 12km res [m^3/s]**
- In **'Pan the map'** panel (right to the map)
  Zoom over Pakistan by suing '**Zoom in'** arrow
- Enter **Start Time:** 00Z01Jul2015 **and End Time:** 21Z15Aug2015
- Click on '**Animate'** and notice how streamflow values change in the rives in central and northern Pakistan over this period

Please answer questions based on this GFMS exercise of the Indus River flood over Pakistan here: Advanced Flood Management Training Homework Assignment # 1 - GFMS exercise of the Indus River flood (Due April 30, 2016) http://goo.gl/forms/obubMNf5HH